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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,368	01/10/2002	Thomas E. Broome	1001.1388101	8240

28075 7590 10/31/2005

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EXAMINER

EREZO, DARWIN P

ART UNIT PAPER NUMBER

3731

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,368

Applicant(s)

BROOME ET AL.

Examiner

Darwin P. Erez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-35, 37 and 39-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-35, 37 and 39-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 32-35, 37, 39-49 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,814,064 to Daniel et al.

As to claim 32, Fig. 18B of Daniel discloses a filter assembly comprising an elongate shaft **258**, a filter **262** disposed and attached to a distal end of the shaft, the filter including a filtering region (the whole area of filter **262**). The filtering region of Daniel includes a distal end, a proximal end and a major opening defined adjacent the proximal end (seen in Fig. 18B) and a single layer of filter membrane extending between the major opening and the distal end of the filtering region (in col. 3, lines 35-42, Daniel discloses that the mesh can be a membrane having holes, e.g., a single cone-shaped piece). Daniel also discloses the filtering region having a first tapered portion (the convex portion of the filter) and a second tapered portion (the concave portion of the filter). In fact, the two separate portions are defined by (separated by) this junction where the outer shape of the filter changes from being convex to concave. Each of the two tapered portions defines many different included angles.

As to claim 33, Daniel teaches the filter having an expanded shape (Fig. 18B) and contracted shape (Fig. 18A).

As to claims 34 and 35, different portions of the filter can be sectioned off to be called the first or second portion, and each of these portion can be selected so that the first portion has a conical shape and the second portion has a frustoconical shape.

As to claim 37, the membrane 242 includes polyurethane [column 10 lines 44-45].

As to claims 39-45, Daniel discloses moving tube 254 distally (see progression from Fig. 18A – 18B – 18 C – 18D) to contact the inner surface/struts of the filter drawing it in on itself.

As to claim claims 46-48, the base diameter of the first tapered portion is smaller, but similar to the size of the retrieval sheath (254).

As claim 49, in Fig. 18D the retrieval sheath has a similar diameter to the diameter of the second tapered portion.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel et al. and in view of US 2002/0045916 A1 to Gray et al.

Daniel teaches that the filter assembly can be attached to the shaft via adhesive or any other connection means (col. 4, lines 53-60), wherein the adhesive or other connection means acts as a limiter. Daniel is silent with regards to a limiter comprising

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a wire. Gray also teaches a filter assembly wherein a cylindrical section **92** is a limiter that limits the base diameter of the first tapered portion; the whole filter is made out of thin strands metal (i.e., "wire") formed into loops. Therefore, since the means of Daniel is an equivalent structure to that of Gray at the time the invention was made, one of ordinary skill in the art would have found it obvious to replace the adhesive means of Daniel with the wire means of Gray.

Response to Arguments

5. Applicant's arguments filed 8/11/05 have been fully considered but they are not persuasive.

Applicant's main arguments for the Daniel reference is directed towards the limitation of a single layer of filter. The applicant argues that Daniel teaches two layers of filter membranes. However, as recited in the rejection above, Daniel teaches the mesh filter composed of a single membrane

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erez who's telephone number is (571) 272-4695. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GLENN K. DAWSON
PRIMARY EXAMINER